LISTING OF CLAIMS:

Claims 50-62 (Cancelled)

63. (New) A light communication device comprising:

a detecting means for detecting an internal state of a living body and for generating a signal representing the detected state;

a transmitting means for transmitting light whose polarization state is modulated on the basis of the signal;

a receiving means for receiving and demodulating the light to extract the signal included in the light; and

a controlling means for receiving the extracted signal.

64. (New) A light communication device comprising:

a controlling means for generating a control signal;

a transmitting means for transmitting light whose polarization state is modulated on the basis of the control signal;

a receiving means for receiving and demodulating the light to extract the control signal included in the light; and

a physiological function assisting means for assisting a function of a living body on the basis of the control signal.

65. (New) The light communication device of Claim 63, wherein the transmitting means comprises a planar emission laser.

66. (New) The light communication device of Claim 64, wherein the transmitting means comprises a planar emission laser.

67. (New) The light communication device of Claim 63, wherein the transmitting means comprises:

a light source comprising a plurality of planar emission laser diodes formed on a semiconductor substrate, each of which having a different direction of polarization; and

driving means for driving selectively the plurality of planar emission lasers.

68. (New) The light communication device of Claim 64, wherein the transmitting means comprises:

a light source comprising a plurality of planar emission laser diodes formed on a semiconductor substrate, each of which having a different direction of polarization; and

driving means for driving selectively the plurality of planar emission lasers.

69. (New) The light communication device of Claim 63, further comprising a display unit that displays information regarding a living body on the basis of the extracted signal.

70. (New) The light communication device of Claim 63, further comprising a holding means for holding the detecting means in a position to detect light transmitted by the transmitting means.

71. (New) A light communication system for performing communication between a physiological function assisting device and a controlling device, the system comprising:

in the physiological function assisting device,

means for detecting an internal state of a living body and generating a data signal representing the detected state;

a first transmitting means for transmitting light whose polarization state is modulated on the basis of the detected data signal;

a first receiving means for receiving and demodulating light transmitted by said controlling means to extract a control signal included in the light;

in the controlling device,

means for generating the control signal;

a second transmitting means for transmitting light whose polarization state is modulated on the basis of the control signal; and a receiving

means for receiving and demodulating light transmitted by said physiological function assisting device, to extract the data signal included in the light.

72. (New) The light communication system of Claim 71, wherein the first transmitting means transmits light whose intensity is modulated, instead of light whose polarization is modulated, whereby a signal is transmitted from the controlling device to the physiological assisting means by polarization modulation and a signal is transmitted from the physiological assisting means to the controlling device by intensity modulation.

73. (New) The light communication system of Claim 71, wherein the second transmitting means transmits light whose intensity is modulated, instead of light whose polarization is modulated, whereby a signal is transmitted from the physiological assisting means to the controlling device by polarization modulation and a signal is transmitted from the controlling device to the physiological assisting means by intensity modulation.

74. (New) The light communication system of Claim 71, wherein at least one of the first transmitting means and the second transmitting means comprises a planar emission laser.

75. (New) The light communication system of Claim 71, wherein at least one of the first transmitting means and the second transmitting means comprises:

a light source comprising a plurality of planar emission laser diodes formed on a semiconductor substrate, each of which having a different direction of polarization; and

driving means for driving selectively the plurality of planar emission lasers.

76. (New) The light communication system of Claim 71, further comprising a display unit that displays information regarding a living body on the basis of the ~~extracted control signal.~~

77. (New) The light communication system of Claim 71, further comprising a holding means for holding the controlling device in a position so that the second detecting means can detect light transmitted by the transmitting means.